Application No. 09/774,099
Submission under 37 C.F.R. §1.114 dated November 12, 2004
Response to the Office Action of June 15, 2004

## REMARKS

This Submission under 37 CFR § 1.114 is responsive to the Office Action dated June 15, 2004. Claims 1 – 8 remain pending in the present application. No amendments were made above. The rejections set forth in the Office Action are respectfully traversed below.

### Response to Previous Amendment

In response to the Amendment filed March 30, 2004, the present Office Action maintained the same prior art rejections, but modified the reasoning regarding how the cited prior art allegedly discloses the threshold value control means of claims 1 and 3, and the means/circuit for stopping in claims 5 and 6.

### Claims 1 and 3 - Variable Second Threshold Value

The new reasoning in rejecting claims 1 and 3 (set forth at item 5 on pages 7 to 8 of the Office Action) appears to assert that the horizontal image start and end signals themselves constitute the claimed first and second threshold values. The new reasoning also emphasizes how the horizontal image start signal and the horizontal image end signal are both *based on the sampling clock*, and that the *frequency of the sampling clocks change*. Since these start and end signals are based on the sampling clock, whose frequency may be changed, the Office Action alleged that the present claimed variable second threshold value is disclosed.

First, the Office Action appears to be confusing the horizontal video start and end signals with the claimed threshold values. These are different things. The start and end signals are pulse signals corresponding to one sampling clock. In particular, the present application describes these signals to be "composed of a pulse signal corresponding to one sampling clock" (see e.g.,

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page 28, lines 18 – 19 and page 29, lines 14 – 16). Likewise, **Koike** also describes the horizontal image start/end signals being "composed of a pulse signal corresponding to one sampling clock" (paragraph 0038). However, these pulse signals are not the threshold value(s) that are used to set these signals. Each of the pulse signals (that constitute the horizontal video start and end signals) is set based on a comparison with a threshold value. The start and end signals themselves are completely different than the threshold value(s) used in setting the start and end signals. Changes to the frequency of the sampling clock have nothing to do with the threshold value(s).

In addition, a fundamental difference between the present claimed invention and **Koike** is that the present invention uses a *variable second threshold value* in setting the horizontal image end signal (see e.g., page 41, lines 3 – 11). In contrast, **Koike** clearly indicates that the horizontal image start/end signals are determined based on the RGB data being larger than (for the start signal) or smaller than (for the end signal) a single *predetermined threshold value* (paragraphs 0038 and 0039). This is similar to conventional settings for the start and end signals described on page 40, lines 2 – 5, of the present specification, in which the start and end positions are determined based on the *same* threshold value. Contrary to this, claims 1 and 3 recite a threshold value control means for controlling, for each vertical period, the second threshold value *depending on the level of the video data at the horizontal video end position detected within the vertical period*. For at least these reasons, the present claimed invention patentably distinguishes over the prior art.

As further described on pages 42 to 44 of the present specification, the threshold value for the end position is updated for each vertical period on the basis of an intermediate threshold value which was calculated in the previous vertical period. Basically, the second threshold value

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is updated every time the vertical synchronizing signal (the V signal) is outputted. Additional details for updating this threshold value is described on pages 43 and 44. In any event, the cited prior art does not teach or suggest the present claimed variable second threshold value.

### Claims 5 and 6 - Stopping Frequency Adjustment for Narrow Videos

As for claims 5 and 6, the bottom of page 8 to the top of page 9 of the Office Action alleged that **Koike** discloses the claimed judgment means in its description of "a comparator for determining for each field if the width of the region where input video exists is smaller than the number of horizontal effective pixels (1024, 1025) on the basis of the result of the calculation by the subtractor (153) as explained above." As for the claimed means for stopping, the Office Action alleged that the corresponding disclosure in **Koike** is the teachings regarding the termination of detection of the total of dots by the up-down counter, when the delay data generation unit 62 stops delay control.

Such disclosures do not correspond to the present claimed features. Claims 5 and 6 recite a judgment means that refers to the "width of a region where input video exists." This is not the same as the disclosures in **Koike** for determining whether the difference between the horizontal image start count value and horizontal image end count value is "1024," "1025," or "1026." The discussion in **Koike** in checking the difference between the horizontal image start and end count values pertain to the determination of the number of horizontal effective pixels. Such disclosures have nothing to do with the "width of a region where input video exists."

Claims 5 and 6 cover the second embodiment of the present invention which checks whether the input video is a narrow video (such as a screen saver image). Such a narrow video

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means that the video has a width of a region where the video exists being smaller than the number of horizontal effective pixels (see e.g., page 51, lines 13 – 18). In such a situation, where the input video is a narrow video, the present claimed invention has a means for stopping the frequency adjustment operation.

Nothing in **Koike** even addresses such a situation involving a narrow video. The behavior of the delay data generation unit stopping the delay control and issuing an instruction to terminate detection of the total of dots to the up-down counter (in **Koike**) has nothing to do with stopping frequency adjustment for narrow videos. For at least these reasons, the present claimed invention patentably distinguishes over the prior art.

A Request for Examiner's Interview is concurrently filed. Of course, if the Examiner allows the present application in view of these comments, then the request for an Interview would be moot. Otherwise, the Examiner is respectfully requested to contact Applicant's undersigned attorney at the telephone number indicated below to arrange for an interview.

In the event that any fees are due in connection with the filing of this paper, please charge any fees to Deposit Account No. 50-2866.

Respectfully submitted,

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